

PATENT APPLICATION

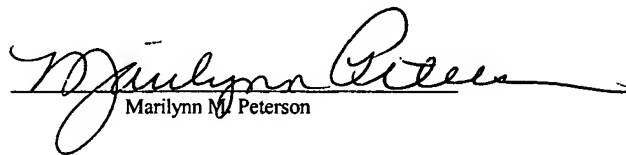
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group }
Art Unit: 1713 }
Attorney }
Docket No.: 121036-0086 }
Applicants: Toshimasa SAGAWA, Haruyoshi TATSU, }
and Masayosi HORIUTI }
Invention: PROCESS FOR PREPARING AQUEOUS }
DISPERSION }
Serial No: 10/541,330 }
Filed: July 1, 2005 }
Examiner: Unknown }

Certificate Under 37 CFR 1.8

I HEREBY CERTIFY THAT THIS PAPER OR FEE IS
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on January 6, 2006 .


Marilynn M. Peterson

REQUEST FOR CORRECTED FILING RECEIPT AND
NOTICE OF ACCEPTANCE OF APPLICATION
UNDER 35 U.S.C. 371 AND 37 CFR 1.495

Commissioner For Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Enclosed is a copy of the Filing Receipt and Notice Of Acceptance Of Application Under
35 U.S.C. 371 and 37 CFR 1.495 received in connection with the above-identified application.

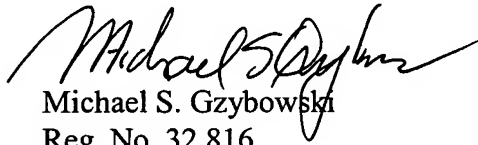
As indicated in the hand-written corrections on the enclosed copy of the Filing Receipt and
the Notice of Acceptance of Application Under 35 U.S.C. 371 and 37 CFR 1.495 the international
application filing date is incorrect. The international application filing date for the respective
application should be as follows:

PCT/JP04/000459 -- 01/21/2004

The correct information for the international application filing date can be found on the published copy of the International Application (Pub. No. PCT WO 2004/0067579), a copy is attached.

The undersigned respectfully requests a corrected Filing Receipt and a Notice Of Acceptance Of Application Under 35 U.S.C. 371 and 37 CFR 1.495 showing the requested correction for the above-identified application.

Respectfully submitted,



Michael S. Gzybowski
Reg. No. 32,816

BUTZEL LONG
350 South Main Street
Suite 300
Ann Arbor, Michigan 48104
(734) 995-3110



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
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APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/541,330	07/01/2005	1713	900	121036-0086		15	1

35684
 BUTZEL LONG
 350 SOUTH MAIN STREET
 SUITE 300
 ANN ARBOR, MI 48104

RECEIVED
BUTZEL LONG

NOV 17 2005

CONFIRMATION NO. 1091

FILING RECEIPT



OC000000017412732

RESPONSE DUE:

DOCKET 1 N/A DOCKET 2 if

Date Mailed: 11/09/2005

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Toshimasa Sagawa, Kitaibaraki-shi, JAPAN;
 Haruyoshi Tatsu, Kitaibaraki-shi, JAPAN;
 Masayosi Horiuti, Kitaibaraki-shi, JAPAN;

Assignment For Published Patent Application

UNIMATEC CO., LTD, TOKYO, JAPAN

Power of Attorney: The patent practitioners associated with Customer Number 35684.

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/JP04/00459 01/24/2004
 Z-1

Foreign Applications

JAPAN 2003-018169 01/28/2003

Projected Publication Date: 02/16/2006

Non-Publication Request: No

Early Publication Request: No



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/541,330	Toshimasa Sagawa	121036-0086

35684
BUTZEL LONG
350 SOUTH MAIN STREET
SUITE 300
ANN ARBOR, MI 48104

INTERNATIONAL APPLICATION NO.

PCT/JP04/00459

I.A. FILING DATE	PRIORITY DATE
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01/24/2004

01/28/2003

CONFIRMATION NO. 1091

371 ACCEPTANCE LETTER



OC000000017412733

Date Mailed: 11/09/2005

NOTICE OF ACCEPTANCE OF APPLICATION UNDER 35 U.S.C 371 AND 37 CFR 1.495

The applicant is hereby advised that the United States Patent and Trademark Office in its capacity as a Designated / Elected Office (37 CFR 1.495), has determined that the above identified international application has met the requirements of 35 U.S.C. 371, and is ACCEPTED for national patentability examination in the United States Patent and Trademark Office.

The United States Application Number assigned to the application is shown above and the relevant dates are:

<u>07/01/2005</u>	<u>07/28/2005</u>
DATE OF RECEIPT OF 35 U.S.C. 371(c)(1), (c)(2) and (c)(4) REQUIREMENTS	DATE OF COMPLETION OF ALL 35 U.S.C. 371 REQUIREMENTS

A Filing Receipt (PTO-103X) will be issued for the present application in due course. **THE DATE APPEARING ON THE FILING RECEIPT AS THE " FILING DATE" IS THE DATE ON WHICH THE LAST OF THE 35 U.S.C. 371 (c)(1), (c)(2) and (c)(4) REQUIREMENTS HAS BEEN RECEIVED IN THE OFFICE. THIS DATE IS SHOWN ABOVE.** The filing date of the above identified application is the international filing date of the international application (Article 11(3) and 35 U.S.C. 363). Once the Filing Receipt has been received, send all correspondence to the Group Art Unit designated thereon.

The following items have been received:

- Copy of the International Application filed on 07/01/2005
- Copy of the International Search Report filed on 07/01/2005
- Preliminary Amendments filed on 07/01/2005
- Information Disclosure Statements filed on 07/01/2005
- Oath or Declaration filed on 07/01/2005
- Copy of references cited in ISR filed on 07/01/2005
- U.S. Basic National Fees filed on 07/01/2005
- Assignment filed on 07/01/2005
- Priority Documents filed on 07/01/2005
- Power of Attorney filed on 07/01/2005

(19) 世界知的所有権機関
国際事務局(43) 国際公開日
2004年8月12日 (12.08.2004)

PCT

(10) 国際公開番号
WO 2004/067579 A1

- (51) 国際特許分類: C08F 2/16, 2/44, 220/22, C08L 33/16 (74) 代理人: 吉田 俊夫, 外(YOSHIDA, Toshio et al.); 〒1500022 東京都渋谷区恵比寿南一丁目21-11 ヒルサイド恵比寿202 吉田特許事務所 Tokyo (JP).
- (21) 国際出願番号: PCT/JP2004/000459
- (22) 国際出願日: 2004年1月21日 (21.01.2004) (81) 指定国 (表示のない限り、全ての種類の国内保護が可能): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (25) 国際出願の言語: 日本語
- (26) 国際公開の言語: 日本語
- (30) 優先権データ:
特願2003-018169 2003年1月28日 (28.01.2003) JP
- (71) 出願人 (米国を除く全ての指定国について): ユニマテック株式会社 (UNIMATEC CO., LTD.) [JP/JP]; 〒1058585 東京都港区芝大門一丁目12-15 Tokyo (JP).
- (72) 発明者: および
- (75) 発明者/出願人 (米国についてのみ): 佐川 俊正 (SAGAWA, Toshimasa) [JP/JP]; 〒3191593 茨城県北茨城市磯原町上相田831-2 ユニマテック株式会社内 Ibaraki (JP). 達 春美 (TATSU, Haruyoshi) [JP/JP]; 〒3191535 茨城県北茨城市華川町日場駒木187-11 ユニマテック株式会社内 Ibaraki (JP). 堀内 雅可 (HORIUTI, Masayosi) [JP/JP]; 〒3191593 茨城県北茨城市磯原町上相田831-2 ユニマテック株式会社内 Ibaraki (JP).
- (84) 指定国 (表示のない限り、全ての種類の広域保護が可能): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), ユーラシア (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), ヨーロッパ (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- 添付公開書類:
— 国際調査報告書
- 2文字コード及び他の略語については、定期発行される各PCTガゼットの巻頭に掲載されている「コードと略語のガイダンスノート」を参照。

(54) Title: PROCESS FOR PRODUCING AQUEOUS DISPERSION

(54) 発明の名称: 水性分散液の製造法

(57) Abstract: One or more (meth)acrylates having a polyfluoroalkyl group and a non-fluorinated polymerizable monomer are emulsified in the presence of a surfactant and a polypropylene glycol compound having a molecular weight of 250 to 5,000. The monomers are then copolymerized in the presence of a polymerization initiator to produce an aqueous dispersion. Even when the copolymer is one formed from (meth)acrylates having, as polyfluoroalkyl groups, two or more kinds of perfluoroalkyl groups including a C₁₂ or higher perfluoroalkyl group, the aqueous dispersion prepared has excellent emulsion stability. The aqueous dispersion can hence be effectively used as a water-and-oil repellant, etc.

(57) 要約: ポリフルオロアルキル基含有(メタ)アクリレートおよびフッ素原子非含有重合性単量体を界面活性剤および分子量250~5000のポリプロピレングリコール系化合物の存在下で乳化処理した後、重合開始剤の存在下で共重合反応させて水性分散液を製造する。得られた水性分散液は、炭素数12以上のパーフルオロアルキル基を含有する混合パーフルオロアルキル基をポリフルオロアルキル基として含有する(メタ)アクリレートの共重合体にあっても、それを水性分散液として調製した場合乳化安定性にすぐれ、したがって撥水撥油剤等として有効に使用し得る。

WO 2004/067579 A1

IP4 Rec'd PCT/PTO 09 JAN 2006

CERTIFICATE OF MAILING BY FIRST CLASS MAIL (37 CFR 1.8)			Docket No. 121036-0086	
Applicant(s): Toshimasa SAGAWA, Haruyoshi TATSU, and Masayosi HORIUTI				

Application No. 10/541,330	Filing Date July 1, 2005	Examiner Unknown	Customer No. 35684	Group Art Unit Unknown
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Invention:
PROCESS FOR PREPARING AQUEOUS DISPERSION



Transmittal Letters to the United States Designated/Elected Office Concerning a Submission under 35 U.S.C. 371 (3 pgs), Request For Corrected Filing Receipt and Notice of Acceptance of Application Under 35 U.S.C. 371 and 37 CFR 1.495 (2 pgs), Copies of corrected Filing Receipt and Notice of Acceptance of Application Under 35 U.S.C. 371 (2 pgs), copy of Publication No. PCT WO 2004/067579A1 (first page only) (1 pg), and Return Postcard

I hereby certify that this

(Identify type of correspondence)

is being deposited with the United States Postal Service with sufficient postage as first class mail in an
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envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR

1.8(a)] on January 6, 2006

(Date)

Marilynn M. Peterson

(Typed or Printed Name of Person Mailing Correspondence)

Marilynn Peterson
(Signature of Person Mailing Correspondence)

Note: Each paper must have its own certificate of mailing.

FORM PTO-1390 (Modified) U.S. PATENT AND TRADEMARK OFFICE; U.S. DEPARTMENT OF COMMERCE
(REV. 7-2005)

ATTORNEY'S DOCKET NUMBER

121036-0086

TRANSMITTAL LETTER TO THE UNITED STATES
DESIGNATED/ELECTED OFFICE (DO/EO/US)
CONCERNING A SUBMISSION UNDER 35 U.S.C. 371

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

10/541,330

INTERNATIONAL APPLICATION NO.
PCT/JP2004/000459INTERNATIONAL FILING DATE
21 JANUARY 2004PRIORITY DATE CLAIMED
28 JANUARY 2003

TITLE OF INVENTION

PROCESS FOR PREPARING AQUEOUS DISPERSION

APPLICANT(S) FOR DO/EO/US

Toshimasa SAGAWA, Haruyoshi TATSU, and Masayosi HORIUTI

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☐ This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2. ☒ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below.
4. ☐ The US has been elected (Article 31).
5. ☐ A copy of the International Application as filed (35 U.S.C. 371 (c)(2))
 - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
 - b. ☐ has been communicated by the International Bureau.
 - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
 - a. ☐ is attached hereto.
 - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
 - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
 - b. ☐ have been communicated by the International Bureau.
 - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
 - d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).
11. ☐ A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. ☐ A copy of the International Search Report (PCT/ISA/210).

Items 13 to 23 below concern document(s) or information included:

13. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. ☐ A **FIRST** preliminary amendment.
16. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
17. ☐ A substitute specification.
18. ☐ A power of attorney and/or change of address letter.
19. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.
20. ☐ A second copy of the published International Application under 35 U.S.C. 154(d)(4).
21. ☐ A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4).
22. ☐ Express Mail Label No.

U.S. APPLICATION NO (if known, see 37 CFR 1.5) 10/541,330	INTERNATIONAL APPLICATION NO. PCT/JP2004/000459	ATTORNEY'S DOCKET NUMBER 121036-0086
<p>23. Other items or information:</p> <p>Request For Corrected Filing Receipt and Notice of Acceptance of Application Under 35 U.S.C. 371/ 37 CFR 1.495 (2 pgs) Copies of Corrected Filing Receipt and Notice of Acceptance of Application Under 35 U.S.C. 371 and 37 CFR 1.495(2 pgs) Copy of Publication No. PCT WO 2004/067579A1 (first page only) indicating the international filing date (1 pg) Return Postcard</p>		
The following fees have been submitted:		CALCULATIONS PTO USE
24. <input type="checkbox"/> Basic national fee \$300		\$ \$0.00
25. <input type="checkbox"/> Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article \$0 All other situations. \$200		\$ \$0.00
26. <input type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the international preliminary examination report by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4). . . \$0 Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the as an International Searching Authority. \$100 International Search Report prepared by an ISA other than the US and provided to the previously communicated to the US by the IB. \$400 All other situations. \$500		\$ \$0.00
TOTAL OF 24, 25 and 26 =		\$ \$0.00
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.		
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole)
- 100 =	0 /50 =	0
		x \$250.00
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).		\$
CLAIMS	NUMBER FILED	NUMBER EXTRA
Total claims	- 20 =	0
		x \$50.00
Independent claims	- 3 =	0
		x \$200.00
MULTIPLE DEPENDENT CLAIMS (if applicable) <input type="checkbox"/> + \$360.00		\$ \$0.00
TOTAL OF ABOVE CALCULATIONS =		\$ \$0.00
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.		\$ \$0.00
SUBTOTAL =		\$ \$0.00
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).		\$ \$0.00
TOTAL NATIONAL FEE =		\$ \$0.00
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40 per property +		\$ \$0.00
TOTAL FEES ENCLOSED =		\$ \$0.00
		Amount to be \$
		Amount to be \$

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

- a. ☐ A check in the amount of \$ _____ to cover the above fees is enclosed.
- b. ☒ Please charge my Deposit Account No. 12-2136 in the amount of \$ \$0.00 to cover the above fees.
A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 12-2136. A duplicate copy of this sheet is enclosed.
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

Michael S. Gzybowski
BUTZEL LONG
350 South Main Street
Suite 300
Ann Arbor, MI 48104


SIGNATURE

Michael S. Gzybowski

NAME

32,816

REGISTRATION NUMBER

January 6, 2006

DATE